



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,093	09/19/2003	Bikash Agarwalla	200311526-1	8987
22879 7590 03/03/2011 HEWLETT-PACKARD COMPANY Intellectual Property Administration 3404 E. Harmony Road Mail Stop 35 FORT COLLINS, CO 80528			EXAMINER EL CHANTIL, HUSSEIN A	
			ART UNIT 2441	PAPER NUMBER
			NOTIFICATION DATE 03/03/2011	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM  
ipa.mail@hp.com  
laura.m.clark@hp.com

# Office Action Summary

**Application No.**

10/666,093

**Applicant(s)**

AGARWALLA ET AL.

**Examiner**

HUSSEIN A. EL CHANTI

**Art Unit**

2441

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This action is responsive to RCE received Jan. 4, 2011. Claims 1-27 are pending examination.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4-6, 8-10, 12-13, 15-21 and 23-27 are rejected under 35

U.S.C. 102(b) as being anticipated by Buman et al., U.S. Patent No. 6,026,430 (referred to hereafter as Butman).

As to claim 1, Butman teaches an interactive grid computing system comprising:  
an interactive grid computing service provider (see col. 8 lines 51-col. 9 lines 15, col. 12 lines 42-col. 13 lines 10 and fig. 1a and 6a-6b, Butman provides a computer system plurality of computers belonging to a plurality of domains as shown in fig. 1a and 6a-b that service client requests using resource locator tables; page 1 of the spec defines grid computing as plurality of nodes distributed across multiple domains) comprising:

a resource that said interactive grid computing service providers reserve for a client based on a request from said client for an interactive session for a service that said resource is enabled to provide (see col. 13 lines 55-col. 14 lines 49 and col. 21 lines 25-57, servers store objects i.e. resources which may be a text file, PDF file or a

movie, client C1 communicates with communications server "resource server" using a pipe connection "direct connection" to access an object "resource");

a first firewall coupled to said resource for protecting said resource (see col. 13 lines 42-54 and col. 13 lines 55-col. 14 lines 49, communication servers "resource servers" are coupled to a firewall); and

a remote display server coupled to said first firewall for providing secure access to said resource over a secure connection and for providing interactive graphical data associated with said resource, wherein said client is enabled to communicate directly with said resource over said secure connection during said interactive session (see col. 21 lines 25-57 and col. 13 lines 55-col. 14 lines 49, servers store objects which may be a drawing or a movie i.e. "graphical data" provided to the client through a socket connection i.e. "secure connection"), wherein said direct communication is not virtual and includes physical data transfer between said client and said resource (see col. 21 lines 14-85, objects are transferred from resource server to the client, wherein objects may be PDF files, word files, etc...).

As to claim 2, Butman teaches the interactive grid computing system as described in Claim 1 further comprising a client coupled to said interactive grid computing service provider, said client comprising:

a second firewall protecting said client (see col. 14 lines 15-24, the client is protected with a firewall); and

a remote display resource for communicating with said remote display server through said secure connection to access said interactive graphical data provided by

said remote display server (see col. 21 lines 25-57 and col. 22 lines 11-27, the objects such as drawing or a movie is transmitted to the client).

As to claim 4, Butman teaches the system as described in Claim 2 wherein said remote display resource provides a socksified SSL connection (see col. 14 lines 9-25 and col. 21 lines 59-col. 22 lines 8, data is encrypted and transmitted over a SSL connection).

As to claim 5, Butman teaches the system as described in Claim 1 wherein said interactive graphical data provided by said remote display server is encrypted (see col. 21 lines 59-col. 22 lines 8, data is encrypted and transmitted over a socket connection).

As to claim 6, Butman teaches the system as described in Claim 2 wherein said second firewall is hosting a SOCKS proxy server (see col. 14 lines 9-25, client connects to a socket connection server).

As to claim 8, Butman teaches the system as described in Claim 2 wherein said secure connection through a socks tunnel is used to tunnel said interactive graphical data through said second firewall (see col. 21 lines 59-col. 22 lines 8, data is encrypted and transmitted over a socket connection).

As to claim 9, Butman teaches the system as described in Claim 2 further comprising a software agent associated with said resource wherein if said resource is requested by said client, said software agent initiates interactive communication between said remote display server and said remote display resource (see col. 21 lines 40-65).

As to claim 10, Butman teaches the system as described in Claim 1 wherein said interactive graphical data is a graphical desktop display associated with said resource (see col. 21 lines 25-57).

As to claim 12, Butman teaches a method for interactively accessing a remote desktop across a secure network comprising:

receiving a request for a resource provided by a grid computing application service provider wherein said resource is protected by a first firewall (see col. 22 lines 12-27 and col. 13 lines 42-54, resource servers are coupled to a firewall and sent to the client in response to a request) ;

initiating a remote display server for providing graphical data associated with said resource to a remote display viewer protected by a second firewall (see col. 21 lines 25-57, servers store objects which may be a drawing or a movie i.e. "graphical data" provided to the client through a socket connection i.e. "secure connection");

establishing a secure socket layer (SSL) connection between said remote display viewer and said remote display server, wherein said client is enabled to communicate directly with said resource over said secure connection during said interactive session (see col. 21 lines 25-57 and col. 13 lines 55-col. 14 lines 49,, a socket layer connection is established with the remote server); and

communicating graphical data between said remote display viewer and said remote display server through said SSL connection (see col. 21 lines 25-57 and col. 22 lines 12-42, the graphical data is transmitted to the client) , wherein said direct communication is not virtual and includes physical data transfer between said client and

said resource (see col. 21 lines 14-85, objects are transferred from resource server to the client, wherein objects may be PDF files, word files, etc...).

As to claim 13, Butman teaches the method as described in Claim 12 further comprising tunneling said graphical data through a socks proxy server that comprises said second firewall (see col. 14 lines 15-24, the client is protected with a firewall).

As to claim 15, Butman teaches the method as described in Claim 12 further comprising receiving said request at said grid computing application service provider from a web browser (see col. 3 lines 15-35 and col. 4 lines 17-40).

As to claim 16, Butman teaches the method as described in Claim 12 further comprising encrypting said graphical data (see col. 21 lines 65-col. 22 lines 11).

As to claim 17, Butman teaches the method as described in Claim 12 further comprising using a socks tunnel to tunnel said graphical data through said second firewall (see col. 21 lines 59-col. 22 lines 8, data is encrypted and transmitted over a socket connection).

As to claim 18, Butman teaches the method as described in Claim 12 further comprising authenticating a user associated with said remote display viewer (see col. 17 lines 54-col. 18 lines 2 and col. 19 lines 34-47, servers store the access rights of each user and verify whether the client is authorized to access information stored in the server).

As to claim 19, Butman teaches the method as described in Claim 18 further comprising authenticating said user at an Internet based grid service access point (see col. 17 lines 54-col. 18 lines 2 and col. 19 lines 34-47, servers store the access rights of

each user and verify whether the client is authorized to access information stored in the server).

As to claim 20, Butman teaches an interactive grid computer system comprising a processor coupled to a bus and a memory coupled to said bus and comprising instructions that when executed implement a method for accessing a remote desktop across firewalls comprising:

receiving a request for a resource provided by a grid computing application service provider wherein said resource is protected by a first firewall (see col. 22 lines 12-27 and col. 13 lines 42-54, resource servers are coupled to a firewall and sent to the client in response to a request);

initiating a remote display server for providing graphical data associated with said resource to a remote display viewer protected by a second firewall (see col. 21 lines 25-57, servers store objects which may be a drawing or a movie i.e. "graphical data" provided to the client through a socket connection i.e. "secure connection");

establishing a secure socket layer (SSL) connection between said remote display viewer and said remote display server, wherein said client is enabled to communicate directly with said resource over said secure connection during said interactive session (see col. 21 lines 25-57 and col. 13 lines 55-col. 14 lines 49, a socket layer connection is established with the remote server); and

communicating graphical data between said remote display viewer and said remote display server through said SSL connection (see col. 21 lines 25-57 and col. 22 lines 12-42, the graphical data is transmitted to the client) , wherein said direct



communication is not virtual and includes physical data transfer between said client and said resource (see col. 21 lines 14-85, objects are transferred from resource server to the client, wherein objects may be PDF files, word files, etc...).

As to claim 21, Butman teaches the interactive grid computer system as described in Claim 20 wherein said method further comprises tunneling said graphical data through a socks proxy server that comprises said second firewall (see col. 14 lines 15-24, the client is protected with a firewall).

As to claim 23, Butman teaches the interactive grid computer system as described in Claim 20 wherein said method further comprises receiving said request at said grid computing application service provider from an application (see col. 3 lines 15-35 and col. 4 lines 17-40).

As to claim 24, Butman teaches the interactive grid computer system as described in Claim 20 wherein said method further comprises encrypting said graphical data (see col. 21 lines 65-col. 22 lines 11).

As to claim 25, Butman teaches the interactive grid computer system as described in Claim 20 wherein said method further comprises using a socks tunnel to tunnel said graphical data through said second firewall (see col. 21 lines 59-col. 22 lines 8, data is encrypted and transmitted over a socket connection).

As to claim 26, Butman teaches the interactive grid computer system as described in Claim 20 wherein said method further comprises authenticating a user associated with said remote display viewer (see col. 17 lines 54-col. 18 lines 2 and col.

Art Unit: 2441

19 lines 34-47, servers store the access rights of each user and verify whether the client is authorized to access information stored in the server).

As to claim 27, Butman teaches the interactive grid computer system as described in Claim 20 wherein said method further comprises authenticating said user at an Internet based grid service access point (see col. 17 lines 54-col. 18 lines 2 and col. 19 lines 34-47, servers store the access rights of each user and verify whether the client is authorized to access information stored in the server).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**3.** Claims 3, 7, 11, 14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butman in view of Herse et al., U.S. Patent No. 7,127,745 (referred to hereafter as Herse).

As to claim 3, Butman teaches the wherein said remote display resource modified for secure access and for viewing a graphical desktop display associated with said resource (see col. 21 lines 25-57 and col. 22 lines 11-27, the objects such as drawing or a movie is transmitted and viewed by the client using an appropriate application).

Butman does not explicitly teach that the remote display resource is a VNC. However, Herse teaches a system and method that enables multiple users to access

and share an application i.e. "resource" at a remote location using a virtual network computing (VNC) (see abstract).

It would have been obvious for one of the ordinary skill in the art at the time of the invention to modify Butman by installing and using VNC to access the resource on the remote display server as taught by Butman because doing so would make the system and method more efficient in the development of software applications in terms of saving time, money and travel, as the participating users do not have to be physically present at one location to share the desktop computer as explicitly taught and suggested by Herse (see Herse col. 1 lines 17-39).

As to claims 7 and 11, Butman teaches the system as described in Claim 1 wherein said first firewall is hosting a proxy server (see col. 14 lines 9-25).

Butman does not explicitly teach that the proxy server is a VNC server. However, Herse teaches a system and method that enables multiple users to access and share an application i.e. "resource" at a remote location using a virtual network computing (VNC) enabled server and client (see abstract).

It would have been obvious for one of the ordinary skill in the art at the time of the invention to modify Butman by installing and using VNC to access the resource on the remote display server as taught by Butman because doing so would make the system and method more efficient in the development of software applications in terms of saving time, money and travel, as the participating users do not have to be physically present at one location to share the desktop computer as explicitly taught and suggested by Herse (see Herse col. 1 lines 17-39).

As to claim 14, Butman teaches the method as described in Claim 12 further comprising hosting a proxy server at said first firewall (see col. 14 lines 9-25).

Butman does not explicitly teach that the proxy server is a VNC server. However, Herse teaches a system and method that enables multiple users to access and share an application i.e. "resource" at a remote location using a virtual network computing (VNC) enabled server and client (see abstract).

It would have been obvious for one of the ordinary skill in the art at the time of the invention to modify Butman by installing and using VNC to access the resource on the remote display server as taught by Butman because doing so would make the system and method more efficient in the development of software applications in terms of saving time, money and travel, as the participating users do not have to be physically present at one location to share the desktop computer as explicitly taught and suggested by Herse (see Herse col. 1 lines 17-39).

As to claim 22, Butman teaches the interactive grid computer system as described in Claim 20 wherein said method further comprises hosting a server at said first firewall (see col. 14 lines 9-25).

Butman does not explicitly teach that the proxy server is a VNC server. However, Herse teaches a system and method that enables multiple users to access and share an application i.e. "resource" at a remote location using a virtual network computing (VNC) enabled server and client (see abstract).

It would have been obvious for one of the ordinary skill in the art at the time of the invention to modify Butman by installing and using VNC to access the resource on

Art Unit: 2441

the remote display server as taught by Butman because doing so would make the system and method more efficient in the development of software applications in terms of saving time, money and travel, as the participating users do not have to be physically present at one location to share the desktop computer as explicitly taught and suggested by Herse (see Herse col. 1 lines 17-39).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUSSEIN A. EL CHANTI whose telephone number is (571)272-3999. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571)272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hussein Elchanti/  
Primary Patent Examiner

Feb. 24, 2011